

A NEW GEOMETRID GENUS FROM NORTH AMERICA, WITH A DISCUSSION OF ITS TYPE (LEPIDOPTERA).

By J. F. GATES CLARKE,

Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture.

The new genus of Geometridae described below is closely allied to both *Hulstina* and *Pterotaca* and the moths of all three genera look much alike. In genitalia, however, it appears to be most closely allied to *Nepterotaca*.

JENANA, new genus.

Plate 11, Figs. 1-5.

Labial palpus porrect, not exceeding front. Frontal prominence rounded, terminating in a ridge between the antennae and with a narrow, horizontal, corneous plate below. Tongue well developed. Antennae bipectinate in both sexes, the pectinations shorter in the female than in the male; pectinations arising from slightly before middle of segments.

Fore wing broad, pointed, with 11 veins; costa straight or slightly concave; fovea absent in both sexes; 2 from well before angle of cell; 3 and 4 approximate at base; 10 and 11 coincident, forming, by anastomosis with 9, a long narrow areole; 1b not furcate at base.

Hind wing ample, outer margin excavated between 1 and 3; 8 approximate to 7 for less than half the length of the cell.

Fore tibia with short apical spine; hind tibia without hair pencil.

Male genitalia with harpe broadly attached at base; costa produced beyond cucullus; armature of the sacculus consisting of a cluster of stout curved spines; uncus narrow, simple, pointed; gnathos well developed.

Female genitalia with signum present.

Genotype.—**Glaucina simularia** Barnes and McDunnough.

The pectinations of the antenna arise from about the middle of the segments, while in *Pterotaca* and *Hulstina* they arise from the apices of the segments and in *Nepterotaca* their origin is at the bases of the segments. In *Jenana* the palpus does not exceed the front, the base of vein 1b of the fore wing is simple, and vein 8 of the hind wing is approximate to vein 7 for less than half the length of the cell, while in the other three genera the palpus does exceed the front, the base of vein 1b is furcate, and vein 8 is approximate for at least half the length of the cell.

The genitalia of *Jenana* are indistinguishable from those of *Nepterotaca*. From *Pterotaca* and *Hulstina*, *Jenana* can be distinguished by the pointed uncus, the extension on the costa of the harpe, and the absence of cornuti in the male, and by the simple sclerotized signum of the female. In *Pterotaca* and *Hulstina* the signum is either absent or is a stellate plate.

Jenana simularia (Barnes and McDunnough).

Glaucina simularia Barnes and McDunnough, Cont. Nat. Hist. Lepid. N. Amer., vol. 4 (2): 152, pl. 21, fig. 14, 1918.—McDunnough, Check list of the Lepidoptera of Canada and the United States of America (Part I, Macrolepidoptera), No. 4831, 1938.

Male genitalia.—Harpe broader apically than basally; costa, beyond cucullus, clothed with strong hairs; cucullus with median excavation; armature at distal end of sacculus consisting of seven or eight strong curved spines arising from a broad, strongly sclerotized projection. Anellus a long, strap-like plate broadly dilated proximally and distally. Aedeagus stout, straight, somewhat narrower at middle than at either end; distal end flattened and bluntly pointed and armed with a sharp, slender spine.

Female genitalia.—Ostium with paired, sclerotized lateral ridges. Ductus bursae with a broad sclerotized band at ostium. Bursa copulatrix round; signum a simple sclerotized plate with a prominent posterior transverse ridge.

Alar expanse.—24–33 mm.

Type.—In the United States National Museum.

Type locality.—Monachee Meadows, Tulare County, Calif., altitude 8,000 feet.

Distribution.—*California*: Inyo Mountains, Inyo County, altitude 9,000 feet (18 ♂♂, 11–V–1936, R. H. Andrews and Lloyd M. Martin; 12 ♂♂, 28–V–1937, M. Walton); Lundy Creek, near Mono Lake, 2 ♀♀ (10–V–1936, Lloyd M. Martin); Monachee Meadows, Tulare County, altitude 8,000 feet, ♂♀ (July 8–14). *Utah*: Eureka, ♂ (4–VI–1921, Tom Spalding); Ridgefield, ♂ (28–V–1930).

Remarks.—When Barnes and McDunnough described this species they acknowledged that it was probably misplaced in *Glaucina*. The pectinations of the female antenna and the habitus will immediately distinguish it from the species of that genus.

The specimens from Utah, which I have associated with the California examples, are smaller but undoubtedly belong here.

I am indebted to Dr. J. A. Comstock for the long series from California. Until the receipt of this series the species was represented in the National collection by the unique type female and two additional battered specimens.

PLATE 11.

Jenana simularia (Barnes and McDunnough).

1. Wings.

2–2a: 2, lateral view of head, male; 2a, section of male antenna.

3–3a: 3, lateral view of head, female; 3a, section of female antenna.

4–4c: Male genitalia: 4, ventral aspect with aedeagus removed; 4a, aedeagus, ventral view; 4b, armature of sacculus, enlarged, from outer side of harpe; 4c, armature of sacculus, enlarged, from inner side of harpe.

5. Female genitalia, ventral view.

All drawings are by Eleanor A. Carlin, Bureau of Entomology and Plant Quarantine.

